Gtk

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Gtk

GTK, or the GIMP Toolkit, is a multi-platform toolkit for creating graphical user interfaces.

Links

Gtk home page

Working with Gtk+

MSYS2 / MINGW-64

- Install **GTK3** and its dependencies. Open MSYS2 shell and run:

  `pacman -S mingw-w64-x86_64-gtk3`
- (recommended): Install GTK core applications
  - **Glade** is a GUI designer for GTK. It lets you design your GUI and export it in XML format. You can then import your GUI from your code using the GtkBuilder API. g++ <programname>.cc -lncurses -I/mingw64/include/ncurses

To install **Glade**:

`pacman -S mingw-w64-x86_64-glade`

- **Devhelp** is a help browser. It lets you easily navigate offline in the GTK, glib and gobject API help relative to the version of these libraries installed on your system.

To install **Devhelp**:

`pacman -S mingw-w64-x86_64-devhelp`

Links

install on windows

Quick example

```
#include <gtk/gtk.h>

static void
print_hello (GtkWidget *widget,
             gpointer   data)
{
  g_print ("Hello World\n");
}

static void
activate (GtkApplication *app,
          gpointer        user_data)
{
  GtkWidget *window;
  GtkWidget *button;
  GtkWidget *button_box;

  window = gtk_application_window_new (app);
  gtk_window_set_title (GTK_WINDOW (window), "Window");
```

```
  gtk_window_set_default_size (GTK_WINDOW (window), 400, 400);

  button_box = gtk_button_box_new (GTK_ORIENTATION_HORIZONTAL);
  gtk_container_add (GTK_CONTAINER (window), button_box);

  button = gtk_button_new_with_label ("Hello World");
  g_signal_connect (button, "clicked", G_CALLBACK (print_hello), NULL);
  g_signal_connect_swapped (button, "clicked", G_CALLBACK (gtk_widget_destroy), window);
  gtk_container_add (GTK_CONTAINER (button_box), button);

  gtk_widget_show_all (window);
}

int
main (int     argc,
      char **argv)
{
  GtkApplication *app;
  int status;

  app = gtk_application_new ("org.gtk.example", G_APPLICATION_FLAGS_NONE);
  g_signal_connect (app, "activate", G_CALLBACK (activate), NULL);
  status = g_application_run (G_APPLICATION (app), argc, argv);
  g_object_unref (app);

  return status;
}
```

Compiling and build:

```
gcc `pkg-config --cflags gtk+-3.0` -o TestGtk TestGtk.c `pkg-config --libs gtk+-3.0`
```

GTKMM

gtkmm is the official C++ interface for the popular GUI library **GTK+**. Highlights include typesafe callbacks, and a comprehensive set of widgets that are easily extensible via inheritance.

Home Page GTKMM

Working in MSYS2 / MINGW-64 environment

https://wiki.gnome.org/Projects/gtkmm/MSWindows

- To install the library

  ```
  pacman -S mingw-w64-x86_64-gtkmm3
  ```

- To install

  ```
  pacman -S pkg-config
  ```

Quick example

```
#include <gtkmm.h>

int main(int argc, char** argv)
{
        auto app = Gtk::Application::create(argc, argv);

        Gtk::Window window;
        window.set_default_size(600,400);

        return app->run(window);
}
```

Compile :

```
g++ -std=c++11 TestGtkmm.cc -o TestGtkmm.exe $(pkg-config gtkmm-3.0 --cflags --libs | sed 's/ -I/ -isystem /g')
```